



Draft Water Resources Management Plan 2025-2050

Customer Summary





new
deal

Bringing water to life – supporting the lives of people and the places they love for generations to come.

As a responsible business and one of the largest employers in the South West, we recognise that it's not just what we do, but why we exist, that can make the biggest societal difference to the lives of customers and the communities we serve.

Our draft Water Resources Management Plan 2025 - 2050 sets out how South West Water will make sure there continues to be a secure supply of water to customers in the future while also protecting and enhancing the environment. It shows how we intend to manage water resources, including understanding how customer demand for water and supplies of water will change over time.

The plan is reviewed every year and a new plan is prepared every five years.

The plan supports our region's economic health, the wellbeing of those who live, work in and visit our region, and creates more green and blue spaces for future generations to come.

This document covers the following:

- Foreword
- Our priorities for the future
- Our supply area
- Key trends and challenges in a changing world
- Our 2022 experience and the immediate future
- What this means for us
- Creating our plan in partnership
- What our water resources management plan provides
- How we created our plan
- Our roadmap
- The blend of solutions
- Our regional plans
- How could the plan affect you?
- Public consultation

FOREWORD

I'm pleased to be able to share our draft Water Resources Management Plan with you.



Our aim in publishing this draft plan is to set out how we will evolve our water resources so that future generations can depend on them. Our plan will:

1. Increase recycling of water
2. Nurture rivers and reservoirs, protecting the wildlife that depends on water habitats
3. Ensure a diversified mix of water resources, protecting household and business customers from the impacts of climate change and increasing hot and dry summers
4. Ensure a resilient infrastructure that can support tourism and the long-term economic health of the region.

The role of responsible business is one of stewardship for sustainable living, and what we do and how we do it is driven by our purpose – supporting the lives of people and the places they love for generations to come. We take in rain; we store it; we treat it to make it safe for all, and we distribute it to households and businesses across the region. We then collect and clean it and release it back into the environment, where it travels to the sea – and then the cycle starts all over again. As it makes its way through the landscape and our network, we ensure that water continues to provide healthy habitats for wildlife and recreational spaces for communities.

Managing this precious resource is essential for hygiene, health and recreation.

We operate across a unique region. We are surrounded by water, be it coasts, rivers, reservoirs or lakes. We are one of Britain's most treasured tourist regions. Our infrastructure and water demands flex to accommodate a population that swells with visitors in the summer months.

But our region is changing. The South West is particularly vulnerable to climate change, given its 860 miles of coastline. The drought of 2022 has been devastating for river flows, groundwater levels and reservoir stocks, putting water resources under pressure for customers. By 2050, summers in the South West will be on average 2-3 degrees Celsius warmer than today, with at least 20 days a year of extreme heat. Also by 2050, the chance of summers as hot as the one we have just experienced in 2022 will increase to 50%.

Coupled with the drought of 2022, since the pandemic we have seen the resident population and visitor numbers swell even further – with our longer-term population growth expectations and associated demand being realised right now. We do not know if that population surge since 2020 will continue, but we do anticipate a further 350,000 people will be living and working in the region, increasing the need for water as well as calling for an increase in housing connected to our network.

From this, one thing is clear – whether you are a household or business customer, a farmer, or a water company – water resources will become stretched, with competing priorities.

We are determined to make the South West resilient to the increased risks of drought, to support sustainable economic and tourism growth, and to protect our environment, while reducing our carbon footprint.

Our work to date sets out the need to transform the way we all use water, as we adopt new ways of working, focus on sustainable operations and decarbonisation, think innovatively, and empower household and business customers to make informed decisions around water use.

This means ensuring that we have a diversified mix of water resources – surface water reservoirs, repurposed mines and quarries and desalination (given our geographical proximity to the sea). We are also working with other water companies to share resources. For example, in the Mendip Hills there are quarries and pits that are well suited to be used for raw water storage.

Cheddar is also a well-established site for a second reservoir that could be used to increase the resilience of water resources across the entire region. And with increased interconnections and reduced leakage, we can make sure that we share sources of water around the region, protecting household and business customers from changing weather patterns and growth.

We will invest further in reuse and recycling. Today, most of the water we all use, along with rainwater that lands on our roofs and driveways, all ends up going down the drain and into the sea. We will introduce recycling schemes that will retain and recycle this water, keeping it to protect customers and the environment. We are pleased to be working on the large joint Poole recycling scheme with Wessex Water as a first key step.

We will do our bit to lead the way to make homes fit for the challenge, which will also support government targets to reduce leakage by 50% and reduce consumption by a quarter by 2050. Homes need to be able to recycle water, using more rainwater butts and rainwater harvesting systems. We will ensure that every home that needs a rainwater butt has one. Smart meters for all will help homes to manage water use and identify leaks on customer properties, which currently account for over one third of all leaks. This will ensure that our customers' homes are smarter and healthier in the future.

Overall, we want to make sure that this draft Water Resources Management Plan delivers for everyone a future that we can be proud to pass on to the next generation. Please do take this opportunity to respond to this draft version and have your say.

Susan Davy

Chief Executive Officer

HAVE YOUR SAY!



This customer summary of our draft Water Resources Management Plan is for you to find out what we are planning and how it may affect you.

Some particular questions you may wish to consider are suggested at the end of this summary on [page 40](#).

All responses to this consultation should be sent to the Secretary of State for the Environment, Food and Rural Affairs (Defra).

You can respond by e-mail to water.resources@defra.gov.uk

Please carbon copy (cc) wrrmp@southwestwater.co.uk

Please title your e-mail 'SWW draft Water Resources Management Plan'.

You can respond by letter to:
Secretary of State, Water Resources Management Plan Water Services,
Department for Environment, Food and Rural Affairs Seacole 3rd Floor
2 Marsham Street London SW1P 4DF.

OUR PRIORITIES FOR THE FUTURE

Having an overall strategic approach and vision for the next 25 years is an essential basis on which we can co-create plans for a sustainable future for our region.

Along with our household and business customers and a broad range of stakeholders who have particular needs and contribute vital skills and insights, collectively we will be instrumental in determining how we will all face the challenges of the coming decades and use them to secure society and the natural environment in a stronger position than ever.

We will champion **recycling and reuse**, working with stakeholders to encourage home improvement grants that will allow properties to harvest rainwater and grey water, reducing the need for potable water to water gardens and clean driveways and patios.

We are committed to **nurturing the environment**. We will increase our work to restore uplands and moorlands to make the water environment more resilient. We will address abstractions at sensitive locations to protect river flows and wildlife that depends on water habitats.

We are committed to **providing water resources to meet all needs** for households, businesses, and the environment. We will develop a diversified mix of water resource solutions, including desalination. We will reduce leakage, including customer side leakage, as we look to continue bring leakage down, targeting a 50% reduction by 2050. We will build greater capacity, through building more reservoirs and interconnection, facilitating greater transfer and recycling.

We are committed to **a resilient infrastructure**, capable of meeting the challenge of climate change, boosted by the decarbonisation of our operations and investments.

And overall, we are committed to **working with our household and business customers and stakeholders** to encourage thriving communities across the region, ensuring affordable bills and seeking active participation from our customers and communities to help us understand and address their needs. Working with local partners, we'll deliver our shared objectives for people and the environment.



OUR SUPPLY AREA

South West Water provides water for 2.2 million people living and working in Cornwall, Devon, and parts of Somerset and Dorset as well as in the Bournemouth area and the Isles of Scilly.

We supply the stuff of life for everyday use in households and businesses and make sure the water keeps flowing to irrigate our crops and keep our industries productive. A plentiful supply of fresh water is vital to our regional economy and to our health and wellbeing on every level. Our legendary vistas of unspoiled rural landscape attract growing numbers of tourists at the same time as supporting a thriving agricultural and horticultural sector that supplies the nation.

The regions we serve are set apart within the UK. While many areas of the country are partly supplied with water brought in from elsewhere, in the South West, all our water resources are home-grown.

Managing water resources is something we all do in small and large ways. Water surrounds our land; it formed our land and continues to sustain our land and livelihoods. We are working together with all who depend on it to make sure that it flourishes and prospers for generations to come.



WATER RESOURCE ZONE 1
COLLIFORD

see page 22

for more information

WATER RESOURCE ZONE 5
ISLES OF SCILLY

see page 30

for more information

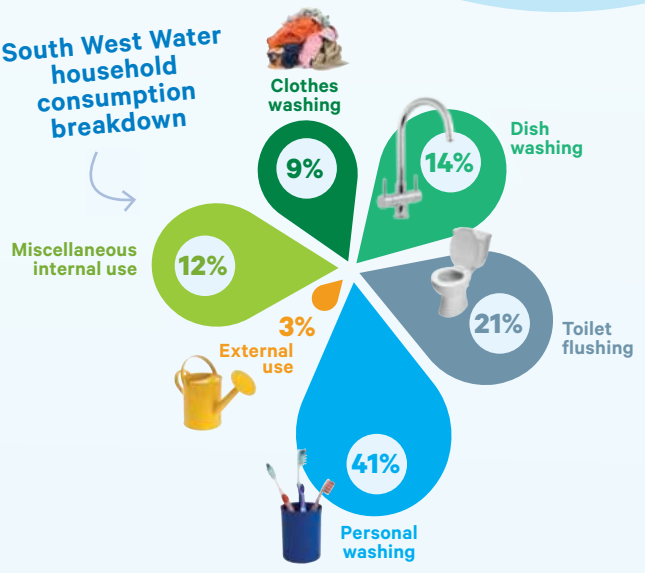


DID YOU KNOW?

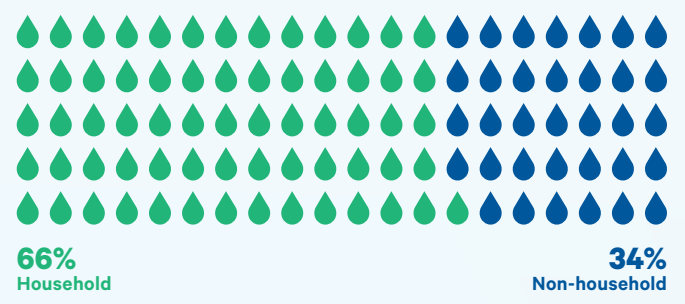
We supply an average of
490 million
litres of water each day

We have over
80,000
business customers
(wholesale)

South West Water household consumption breakdown



Water demand by sector



KEY TRENDS AND CHALLENGES IN A CHANGING WORLD

Climate and population trends are shifting. The UK is getting drier, and the challenges of managing our water resources are changing as we reach for higher standards in caring for the environment.

The prolonged dry spell of Summer 2022 brought these challenges to the front of public consciousness. It triggered us, for example, to initiate the "Stop the Drop" campaign – incentivising customers to reduce their consumption to help get Colliford reservoir to 30% storage by 31 December. However, we have been working in the background to understand what is changing and how we can secure our supply and leave the environment better than we found it. Hosepipe bans and repairing leaks are two well-known options for conserving water. However, South West Water is planning to invest in a blend of measures that have been thoroughly evaluated to give the best value to our customers. We are confident that our plan is the right one to support our communities and environment to continue thriving. South West Water is taking a lead in identifying opportunities to improve how our precious water is managed throughout the region:

- Working with all stakeholders, beneficiaries and policy-makers to co-create our Water Resources Management Plan (WRMP)
- Aligning our plan with broader regional plans in the UK
- Working with nature
- Working with communities
- Changing hearts and minds to use water more efficiently.

Climate change

While the amount of rain we receive is more plentiful than many parts of the UK, especially in the upland areas, we know this will become more concentrated in just a few months of the year, and it will be more intensive. However, water also runs away very quickly in the South West, due to our geography and geology, so we must innovate to slow it down or recycle it.

There will be more summers like 2022, putting pressure on our resources. Hotter, drier summers will mean more water is lost through evaporation just at the time when demand is also higher due to greater numbers of visitors to our region and the inevitable increased need for water.

By 2050...

AVERAGE DAILY TEMPERATURES

could increase
up to 18°C

increase of 2.2°C



AVERAGE SUMMER DAILY TEMPERATURES

could increase **to 23°C**

increase of 3°C



We can expect
much drier summers

50% chance
of summers as
hot as in 2022

A **16-fold increase**
in the frequency of
heatwave events

above 30°C



Rainfall
in the region
will become
much more variable

Population growth

Following the pandemic, demand for water in the South West grew by the equivalent of 265,000 more consumers. Previous predictions expected this much growth to be spread over the next 25 years, so it has brought the future scenario rapidly forward. An additional 350,000 people are expected to be living and working in the region by 2050.

The highest regional rate of growth in households is projected to take place in the South West. In the first five years of our plan we expect the number of properties to grow by 44,000, and by 189,000 over the full 25 years of the plan. With more people taking holidays closer to home, the number of tourists expected to visit our region is also expected to grow significantly.

The increased population will also require more land for crop production and livestock, and more irrigation.

Rising expectations

Caring for the environment goes well beyond preserving the beauty of the landscape in the South West to address growing concerns globally and the expectation of our customers and regulators that our work will be beneficial to nature. Our plan reflects a greater value being placed on our natural environment and the diversity of life it sustains. Our understanding of the environment and our effect on it is constantly being upgraded, and this means meeting more stringent targets to minimise the effects of human water use and work in harmony with nature.

Our customers have told us that taking the lead on environmental matters is a priority and companies that are supportive of social and environmental issues are viewed more favourably. At the same time, there is less tolerance for restrictions and we are expected to work hard to make sure they are not needed in the future.

National policy

The government has set challenging targets within its 25 year plan to 2050 that sets out how to improve the environment for future generations, within a generation. This means water companies must reduce leakage by half and the 'per capita consumption' (how much water one person uses in a day) by a quarter. It also means that water companies must plan on reduced abstractions from rivers into the future to meet the Government's objectives.

Additionally we must secure the water supply against more severe drought scenarios. Previously, our resilience level was for the kind of drought that is only statistically likely every 200 years. Now, under this draft WRMP, we must be prepared for a 1-in-500 year drought from 2039. According to the European Commission, preliminary data suggests the 2022 drought is the worst across Europe for over 500 years.

It is essential that we achieve net-zero carbon emissions within the timeframes set out by Government, and we must work to co-ordinate our planning on the wider regional levels and develop plans that are coherent with the work of other water and infrastructure companies and broader initiatives.

OUR 2022 EXPERIENCE AND THE IMMEDIATE FUTURE

2022 was an extraordinary and extreme year in South West Water's area of operations. 2022 provided a challenging combination of dry weather and low river flows, record high temperatures that drove a record demand for water supplies and a record level of supply releases, depleting our storages.

Under our current WRMP19, we had planned to be resilient to a 1 in 200 year drought, and we undertook analysis to consider our resilience to a 1 in 500 year drought. While we have not definitively quantified how rare the 2022 event was, we can say:

- The combination of pressures resulted in a situation beyond the currently applicable regulatory planning design requirement of 1 in 200 year resilience.
- Our demand assumptions in our WRMP19 show us to be resilient to a 1 in 500 year low river flow event in Colliford. The actual demand during this year's drought has increased our reliance on drought measures beyond what would have been expected in our previous plan.
- Importantly, we continued supply to our customers through a greater than 1 in 200 year event without resorting to Drought Level 3 (e.g., Non-Essential Use Bans) or Drought Level 4 (e.g., standpipes and rota cuts) actions. Consistently maintaining our existing levels of service is a remarkable achievement and testimony to the flexibility of our people and systems.

Our response from 2022 to the start of our Water Resource Management Plan in 2025

Our response to the 2022 circumstances has continued while we have been writing this draft WRMP. Specifically, we are working to restore our reservoir levels to a robust operating position to the end of 2023. We aim to achieve this through a combination of:

- Permit and licence changes worked through with Government agencies
- Repurposing some mines and quarries
- Developing desalination facilities on a few locations along the Cornwall coast.

None of these initiatives are included in the baseline for this draft WRMP but they will be progressed to a stage where they can be included by the time of our Statement of Response.



Resilient to a 1 in 500 year event

In this draft WRMP, we have planned to be resilient to a 1 in 500 year drought. The EA technical guidance and the Government expectations for water resources planning (April 2022) both state that this level of resilience should be achieved by 2039. This plan has therefore set out adaptive programmes to future demand and supply scenarios so that South West Water will be able to supply water to its customers through a 1 in 500 year event without resorting to emergency drought orders.

Other initiatives underway that are not currently in our baseline for this draft WRMP

Other initiatives that we are currently progressing do not currently feature in our baseline water resources but will feature in them in our Statement of Response.

Elsewhere in this draft WRMP, we have referred to the Cheddar 2 Strategic Regional Option. While we are undertaking engineering and environmental scoping of this project with our neighbouring water companies as part of West Country Water Resources Regional Group, it does not yet meet the requirements for inclusion in our baseline water resources. We are aiming to have it included in our baseline by the time of our Statement of Response.

Investing in water network resilience

Alongside our work referred to in this draft WRMP, we are also considering how we can increase the resilience of our water network to better respond to system shocks such as the loss of key pipelines, treatment facilities or extreme reservoir drawdown. Many projects are being reviewed, although at this time we are focused on: Pynes to Allers treated water transfer (within the Wimbleball connection), Crownhill SR to St Cleer WTW treated water transfer (Roadford to Colliford link), and Tottiford to Allers water transfer (connecting Wimbleball to Roadford).

These projects do not directly increase our water available for use, so do not appear as options in this draft WRMP. They will, however, improve our ability to move water around our network, creating flexibility to balance our use of different sources of water. Schemes will also provide links between our Water Resource Zones, enabling further inter-zonal support and paving the way for more bulk transfers across our region. The scale of this program has not yet been determined but is likely to be between £50m and £100m.

These projects will feature in our Business Plan (Price Review) submission to be made in late 2023.

WHAT THIS MEANS FOR US

The trends and challenges we have outlined have immediate and far reaching effects on our water resources management strategy.

The bottom line is that there will be less raw water available to us over time, and we will have to take less of it from the environment at some of the locations we currently use. And there will be an increased demand for water due to a hotter climate, increased population, and the need to support higher demand in other sectors such as food production and recreation.

As we must reduce how much water is taken from the environment at our current sites and the demand for water is expected to increase, there will be a growing gap if we do nothing.

Increased uncertainty

As a country known for being wet and rainy, we have built a system that requires generous amounts of rainfall to supply our customers while also protecting the environment. But there is increased uncertainty around weather patterns with hotter, dryer summers predicted. The drought of 2022 shows that we cannot manage this uncertainty solely by reducing demand – we need to work in partnership with other water companies, water users (e.g., farmers), policy makers and regional stakeholders to share resources and plan together.

Sustainability

In all we do, we need to assess, manage and eliminate our net carbon emissions to support progress towards net-zero. This affects everything about our operations, from the technology we use to the way we recycle.

Anticipating the unexpected

Using the best available information, we continuously assess our water supply against predicted changes in demand and the availability of water. The drought of 2022 was exceptional and demonstrated the kinds of demands that could be placed on our water supply system under extreme circumstances. This was not just a theoretical test using models and predicted data, but a real event that enabled us to understand better how we could plan more effectively for future scenarios.

Our adaptive plan

Given the uncertainties in the future, it is important that we have a plan that sets out adaptive programmes to meet future demand and supply scenarios. That is, a plan that allows us to flex as things change. For example, we have looked at:

- What will happen if climate change is more severe than expected
- How we would meet extreme demand if population factors made it up to 6% higher than that observed during the 2022 drought
- What alternative sources would be available if we are not permitted to make the proposed changes to the legal agreements on how much water we take from rivers
- How we could adapt if the development and adoption of smart-metering technology is delayed.

Thinking ahead

Our preferred plan is already ambitious: it is designed to ensure that South West Water is able to supply water to its customers through a 1 in 500 year event without resorting to emergency drought orders.

It also meets an overall expectation to reduce how much water we abstract from the environment. We therefore anticipate that any additional deficit in our supply-demand balance will call for investment in further supply options.

In some cases, it will be too late to start planning alternative sources at the point where we know whether they will be needed or not, so we are already getting ahead with researching, designing and consulting on these options.

You can find out about possible adaptations to our plan on pages [34](#), [35](#) and [36](#) of this summary.

What this means for us continued

**We cannot afford to do nothing.
Adapting to the changing world
means changing our habits of water
use as well as investing heavily in
our water network.**

CREATING OUR PLAN IN PARTNERSHIP

We are in constant conversation with our customers and all those who are affected by the decisions we take on managing water resources, how we invest and when, and how we carry out our plans. An understanding of your views and priorities informs all our business planning and initiatives.



We have listened by asking customers about their views and priorities, as well as holding discussions and workshops with organisations such as environmental NGOs, local and national policy makers and consumer groups. We will keep on listening and testing how acceptable the best value options are throughout the development and delivery of the Water Resource Management Plan.

Our conversations have aimed to gauge the level of awareness that our customers and other partners have about water-resources management issues, to test the acceptability of our plans and to find out how best to communicate and work together in the future.

Listening to customers

We check in frequently with our customers through a range of forums, such as surveys, focus groups, deep dive workshops, and our online Customer Forum, to understand their priorities for where we should invest in the future. This takes place continually to make sure we always know how our customers' views are changing and where we need to adapt our plans to meet their needs.

Our last business plan in 2019 was based on the views of over 27,000 customers. Our engagement with customers hasn't stopped since then: we have carried on the conversations – with a further 16,000 engaged since that time. This is on top of the day-to-day contacts we have with customers through social media, customer calls, and community events. This two-way process of engagement is essential in developing our plans.

As part of our long-term tracking surveys, we have asked customers for their views over time on a range of water resource issues such as water-supply resilience in extreme conditions, avoiding restrictions due to drought, education on water saving, reducing leakage, and boosting habitats and nature. We know that these are all becoming increasingly important issues that our customers want us to continue to invest in.

We also carry out specific surveys, deep dive focus groups, and willingness-to-pay studies to find out more detail, and we have set up our first Customer Forum. These provide ample opportunities for detailed discussion and the free expression of views, and we ensure a cross-section of representation from a range of ages and socio-economic groups. From this we know that customers are concerned about the impacts of climate change and population growth. In response to these pressures, they want us to take action to protect supplies and the environment.

For example, Environmental Leadership 2021 – we engaged customers to understand what it means to be an environmental leader and what they expect from South West Water. An environmental leader is a company that delivers leading levels of performance, has good plans in place for the future, takes the initiative to go beyond what is required, and shares knowledge and innovations. Our customers want us to be an environmental leader. But for others, they need to know what steps we are taking to protect customers and deliver performance. If we are to reduce water demand and drive demand down, customers need to trust our environmental performance and see their bills as affordable and value for money.

Our pioneering WaterShare+ scheme allows customers to share in our success, as well as giving them a greater say in our business. WaterShare+ includes a WaterShare+ Advisory Panel, which is an independent group of customer, business and social representatives whose role is to boost customer engagement and feedback. The WaterShare+ Advisory Panel will review and challenge the development of our final Plan, alongside our wider planned investments and priorities under the Price Review process.

Non-household customers

About 34% of the water we supply is to non-household customers, including schools and hospitals, civic amenities, businesses and industries. Many of these also have challenging targets to meet to care for the environment and we are proactively engaging them so that we can collectively address water resource management.

We have carried out research with a range of businesses, farmers, developers, restaurant owners, café owners, schools, hoteliers, bed and breakfast owners, bar owners and healthcare to find out how they view water in their business and what they currently do to be water efficient. We asked about what types of help we can give, the best options for them, and what they expect from us as their water supplier.

More than just listening

Listening is the best place to start, but our aim is to go on to form excellent partnerships with our customers and other stakeholders, going forward in the same direction and each playing in our strongest position to manage water resources for the benefit of society and the environment in our region. This has led us to form a Stakeholder Forum and to take the initiative in creating working groups for dialogue between stakeholders such as farmers and the agri-food industry.

We are taking the lead by using all the means at our disposal to cultivate and facilitate relationships between diverse groups: hosting workshops and forums, correspondence, setting up one-to-one meetings and carrying out research.

To date we have established four working groups focused on the agri-food sector, water efficiency, fisheries and rivers, and nature-based solutions. Our comprehensive Programme aims to keep engaging with sub-groups in the following categories of stakeholders: customers, internal governance, environmental partners, civil society, investors, policy makers, suppliers, the media, regulators and local government. We bring many of these groups together as convenors of the South West Water Stakeholder Forum, hosting opportunities to exchange ideas.

A wide network of partnership

As members of the West Country Water Resources Group, we are part of an alliance of suppliers and stakeholder organisations covering the wider regions that surround our supply areas. Here we are collaborating on research and strategic planning of our water resources with a fuller understanding of the wider systems where we don't have control but we can have influence.



What we have learned

Overall, we have a growing wealth of feedback to draw on in informing our Water Resources Management Plan.

Household customers have told us...

- Water is a resource under pressure from climate change which must be protected in order to provide benefits for nature and wildlife.
- Some restrictions such as temporary use bans are inevitable and are ultimately worthwhile if they contribute to keeping more water in the environment and protecting sensitive habitats. However, severe water-use restrictions would be extremely difficult to cope with and are completely unacceptable.
- Customers are shocked to hear how much water each person uses – and it is no surprise that they want demand reductions as a priority. Metering is seen as fair, and smart meters can help to manage usage and customer leaks.
- Innovative tariffs that are designed to encourage water efficiency – such as rising block tariffs – are welcomed.
- The benefits of being prepared by investing in new supply options now outweigh the risk that they may not be needed, or are too early, or could be the wrong size.
- Support is highest for reducing leakage, closely followed by more reservoir storage.
- Communities should be protected through more interconnection, allowing water to be shared across the entire South West region.

Non-household customers and other stakeholders have told us...

- We could do more to help them understand how to use less water and to assist them in doing this.
- We should lead by example and be doing all we can to fix leaks and preserve supplies.
- Rainwater collection and the recycling of effluent are good ideas and this is likely to be where the focus should be in the future.
- Smart metering and visits to help identify leaks benefit businesses directly as well as saving water.
- Behaviour change is likely to need some form of incentivisation and greater education.
- A collaborative approach is strongly supported across all the main stakeholder groups.
- Catchment and nature-based solutions should be included in the water resources plan.
- We should make significant investments in activities that regenerate the natural environment as well as increasing the resilience of the environment to drier periods.
- We should engage with local environmental partnerships rather than seek to establish new processes or groups.

Aligning with other plans

Our draft WRMP has been created in alignment with our Business Plan and long-term delivery strategy. We are currently developing our 2024 Business Plan, and the forecasts and activities in our WRMP feed into that plan. It has been carefully harmonised with national and regional planning activities and, through the West Country Water Resources Group, we are integrating our WRMP into the overarching structure of the 2024 Regional Plan along with those of Wessex Water and Bristol Water.

Our Drought Plan sets out what we would do in case of a drought, and it complements the WRMP. The final version of this WRMP will be further updated to reflect the lessons we have learned from the ongoing drought in our region.

Building on the successes of the customer engagement activities already undertaken, we will continue to engage with our household and non-household customers in a variety of ways over the coming months and years.

“I wouldn't mind paying more but I certainly would want to see the figures that it's actually making a difference, because if it's not I wouldn't want to pay it. You'd want to see the numbers going down wouldn't you, on the leaks and the emissions and pollution.”

SWW customer, C2DE,
Aged 18-45

“My children are only 5 and 6, but already they talk about climate change in school and they're aware of issues with the environment, so I think that it's only a thing that's going to continue to be discussed.”

SWW customer, SEG ABC1,
Aged 18-45

“You can't control population growth, you can't control the climate change but you can improve the resilience of water supplies.”

SWW Business customer,
Devon

“I don't think anyone wants to see their bills going up at all, but I think if something's really worthwhile then I think people would accept it, but it's got to be something that doesn't seem like a minor issue.”

SWW customer, SEG ABC1,
Aged 18-45

“I'd say probably increasing water resilience is quite important, because the weather can obviously be quite bad in England, so if there's like storms and things then it's quite good that that's ahead of target, because you don't want to be without water for any period of time.”

BW customer, SEG AB,
Aged 18-30

“I think they should be investing now and looking at a mix of things to see what the best option is for the future.”

SWW customer, C2DE,
Aged 46+

WHAT OUR WATER RESOURCES MANAGEMENT PLAN PROVIDES

RECYCLING AND REUSE AND SMART TECHNOLOGY

While we are asking customers to use less water, we are also committed to supporting them to recycle more water at the household level. They will be able to reap the benefits of lower bills while reducing their overall use.

We will do this by...

- Lobbying for grants to improve water efficiency in homes
- Providing rainwater butts to households and piloting smart water butts
- Promoting rainwater reuse and rainwater harvesting through education and funding of small-scale water efficiency projects.

We will also be upgrading our water-treatment schemes to recover more wastewater and recycle it back into the system rather than letting it be lost to the sea.

A smarter network

New technologies, particularly smarter ways of understanding the flow of water through metering, will open up opportunities to work with greater intelligence. We can exploit these smart tools to improve processes, automation, real-time remote control, and event forecasting.

We are continually investigating exciting innovations such as self-healing pipes that would provide new options for water resource management as well as making significant savings on cost.

NURTURING THE ENVIRONMENT

Reduce our impact on rivers

South West Water is licensed by the Environment Agency to impound water in its supply reservoirs. Under those licences we must make compensation releases into rivers for river health.

South West Water also takes water from rivers under Abstraction Licences issued by the Environment Agency. These licences are periodically renewed and we are being challenged to take less water from rivers as a part of reducing our impact on the environment. We will need to be taking 209ML (megalitres, i.e. 209,000,000 litres) a day less from existing river sources by 2050.

We will do this by...

- Carrying out thorough investigations of other ways of offsetting the demands on rivers, such as recycling wastewater
- Creating more storage options for water so that we can keep rivers fuller in drier periods
- Seeking to change abstraction licences to better reflect the balance of supply and demand
- Funding projects alongside our investments to bring larger environmental benefits.

Where there is evidence, we will take action; where there is uncertainty we will carry out further studies.

With our partners, we are investigating how we can contribute to river restoration schemes across our catchments to boost habitats and water quality by removing weirs and bank reinforcements, adding fish passages, replanting vegetation and trees, and restoring natural flows.

Restoring uplands and moorlands

Across our catchments, we aim to restore over 100 more hectares of land to enhance the water environment and habitats. We will restore peatland across Exmoor, Dartmoor and Bodmin and working upstream and downstream with landowners to change farming practices, to improve soils and reduce run off. These measures help to slow the water down and make it available for longer, while benefitting the environment.

ENSURING WATER RESOURCES FOR ALL NEEDS

Fix more leaks

Our plan is to reduce the amount of water lost through leaks in our network by 50% by 2050 (from 2017-2018 levels). We have already come some way towards this target. A continued focus on reducing leakage at our current rates will accumulate consistent improvements over time.

We will do this by...

- Resourcing and training our teams to respond quickly and effectively to reports of leaks
- Using technology to predict and detect leaks
- Proactively replacing or repairing older components of our network that are more likely to deteriorate
- Supporting customers and businesses to reduce leaks on their properties.

Smarter, healthier homes

On average, each person uses about 145 litres of water a day for cleaning, washing, drinking, toilet flushing, watering plants and preparing food. We have an ultimate target to reduce this to 110 litres per person each day by 2050.

We will do this by...

- Installing more smart meters in households and neighbourhoods
- Helping customers to find and fix leaks on their properties
- Partnering with the community and funding efficiency measures at the local level
- Initiating educational programmes and supplying information on water conservation.

We believe that achieving universal smart metering by 2035 will deliver water efficiency benefits that are important to protect the environment, and to ensure we are on track to reduce consumption per person to 110 litres per day by 2050.

We also consider that the transfer of ownership of customer supply pipes to water companies is important to further reduce leaks, drive efficiency in the costs of replacement, and help households manage costly pipe replacements.

Infrastructure and interconnection

We are adapting how we transfer water around our region, investing in greater interconnection so that we can get water from where it is more available to where it is most needed. We will also need to invest in new reservoirs, for instance using disused quarries to increase our water storage capacity.

A RESILIENT INFRASTRUCTURE

A range of economic incentives are increasingly being used to reduce emissions, including subsidies for green investment and carbon taxes. We plan to achieve Net Zero carbon emissions for all our operations by 2030, 20 years earlier than the government's target. This means reducing the 100,000 tonnes of carbon emissions from all our activities, from offices to fleet vehicles and water treatment works. All our operations are assessed on their carbon neutrality as part of the planning process and we are being ambitious in how we produce and use energy, reducing energy use, becoming more energy efficient and decarbonising our operations.

In planning our management of water resources in the future, we'll have the option of identifying water-trading opportunities with other parts of the country to ensure long-term water supplies.

Furthermore, we will be supporting changes in the regulatory framework so that we can generate value to society and the environment across regions.



You can find out more about
Our Promise to the Planet
[southwestwater.co.uk/about-us/
sustainability/net-zero-plan](https://southwestwater.co.uk/about-us/sustainability/net-zero-plan)

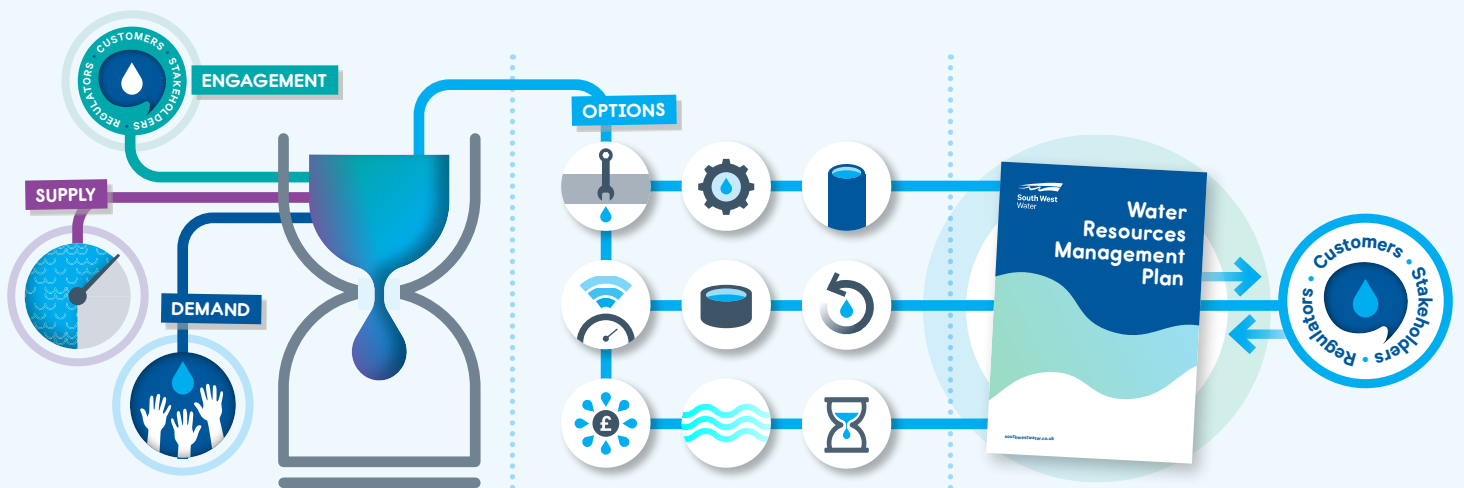
HOW WE CREATED OUR PLAN

South West Water's Water Resources Management Plan (WRMP) is a stage in a continuous process of listening, learning, responding to change and making the best possible decisions for our customers and the environment.

In developing it, we are committed to

- Finding out what matters most to our customers and everyone who depends on our service
- Looking for solutions that work with nature to enhance the environment as well as taking care of our communities
- Being proactive by planning well in advance for the future even if things look "okay" at the moment
- Spending money wisely to balance how much investments cost against their risk and how they will affect the environment
- Using the best available evidence, tools and data to make decisions.

The stages of developing a WRMP



First we research our customers' needs and preferences and consult with stakeholders, including businesses, local authorities, charities, regulators and other water suppliers.

We undertake environmental assessments to build a comprehensive understanding of the water resource challenges we need to address in our plan.

This includes calculating the likely effects of climate change. We compare how much water could be available in the future with how much water could be needed, and build an understanding of when, where and why there may be a shortfall or surplus of supply.

Then we identify all the options that are available to help us resolve expected differences between supply and demand and test them to determine those that provide the best value.

We then select the blend of solutions.

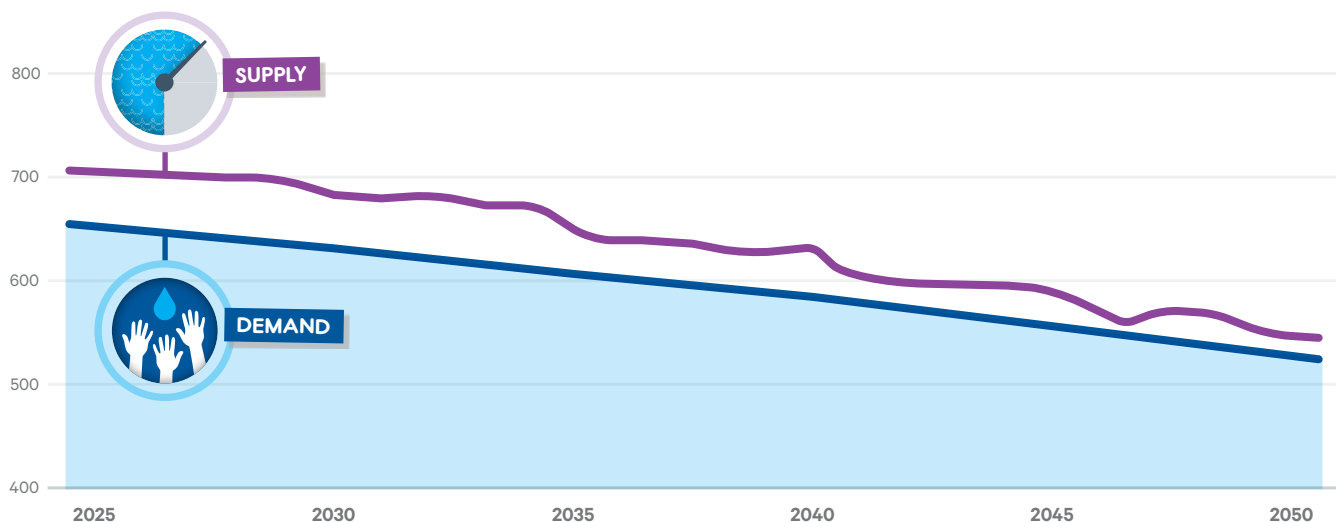
The best solutions will be those that are adaptable and resilient to change in the future as well as balancing the needs of society with those of the environment.

Next we produce our recommended Water Resources Management Plan (WRMP) with the best mix of options, including variations in case the future doesn't turn out as expected.

After a process of scrutiny and challenge by our Board and internal governance, this plan is submitted for review by industry regulators (Ofwat and the Environment Agency), public policy makers, customers and all interested members of the public. We then assimilate their recommendations and insights to produce the final plan.

The WRMP will be kept under review for continuous adaptation and improvement and a new plan created every 5 years.

OUR ROADMAP



Here are some of the ways we are planning to meet the challenges of the future:

	2025-2030	2030-2050
Water efficiency	<ul style="list-style-type: none"> Carrying out home visits and water audits on customer properties Engaging 275 schools to educate on water efficiency Fixing leaky pipes and 2,150 leaky loos, and taking over ownership of supply pipes Extending our smart-metering programme Opening conversations with 3,966 community groups 	<ul style="list-style-type: none"> An innovative programme of rainwater harvesting in 36,000 households (being 30% of new connections – subject to government enabling regulation) 13,750 school visits and 160,000 home visits from our community teams
Environment	<ul style="list-style-type: none"> Reducing abstractions from sensitive rivers by 8ML Spending £855,000 on environmental studies New sources from less sensitive waters 	<ul style="list-style-type: none"> Reducing our overall abstraction by 140ML per day
Supply and demand	<ul style="list-style-type: none"> Expanding the capacity of water treatment works to produce more by 13ML Continuing to reduce leakage to achieve a 35% reduction from our 2017/2018 baseline Bringing new reservoirs into supply 	<ul style="list-style-type: none"> Increasing our capacity to store excess water in Winter Continuing to reduce leakage to achieve a 50% reduction from our 2017/2018 baseline Achieving the targeted per-person consumption of 110 litres per day Universal smart metering (over 90%) Reaping the benefits of new strategic water resources in the wider region, such as Mendip quarries and a second Cheddar reservoir Benefitting from a strategic wastewater recycling project in Poole

Our previous WRMP, published in 2019, focused on reducing leakage as a way to reduce pressure on the water supply. We also committed to optimising our water resources to be more resilient to droughts and developing our planning and forecasting tools to support planning in the future. Since then, we have seen a significant increase in demand due to Covid (as more of the population holidayed closer to home or made more use of second homes in the region). Despite this, we stayed on target to reduce leakage as well as bringing down the amount of water we take from rivers by 5% and installing meters on 11,694 properties.

The world is changing rapidly. Our plans are being updated to meet greater challenges from climate change, population growth, and higher aspirations to protect and enhance the environment according to the expectations of our customers and national targets. Additionally, we are working with ever-improving data and levels of understanding. We have therefore updated our plan based on the latest evidence and Government guidance.

THE BLEND OF SOLUTIONS

Reducing demand



Preventing and fixing leaks

We can improve the efficiency of our supply network by investing where water is being lost through leaks. Putting more experts to work with new technology to detect and respond to leaks around the clock and repairing pipes using new techniques has kept us on track to reduce leakage by 15% by 2025 (from 2017/18 levels), and we plan to do more.



Installing smart meters

There are many types of smart meter, but they all measure how much water is being distributed through a pipe and allow it to be monitored closely. A smart meter may be installed on a particular section of our network, such as a street, as well as individual households having a meter installed that tells them how much water they are using.

We can use this information to build a complete picture of where water is going, and where efficiency could be improved. Smart meters in households help people to be aware of how much water they are using (and therefore use less).

With real-time information on water consumption, we can provide feedback to our customers on water consumption, locate leaks and improve our ability to manage our water supply systems overall.



Promoting community water efficiency

We are asking customers to use less water, and we are committed to helping them to do so through a variety of services. We will fix a leaky loo without charge and can provide rainwater butts and other water-saving products such as tap inserts and shower regulators.

We make funding available for local water-efficiency projects through our Water-Saving Community Fund. These could be small, like a rainwater harvesting project for allotments, or larger, like a wide-ranging education programme. We want to hear from any community groups that have an idea that will help communities to use less water.

Our community team visits schools and supports education initiatives. We are further developing a range of innovative programmes in partnership with communities and non-household consumers such as businesses, universities and factories.

With over 25% of leaks being from customers' supply pipes, taking ownership of supply pipes and repairing leaks on customer properties will also make a significant difference as well as helping customers to find leaks in their homes.

DID YOU KNOW?

The Water-Saving Community Fund has awarded 22 community groups a total over

£73,000

so far for customer-led water-saving initiatives



Increasing supply



Storing more water

We are exploring ways to increase how much water we can store from seasonal rainfall so that there is more available during dry periods. Higher river flows in winter can be pumped up into a reservoir and strategically released to make sure the river level is not compromised when we take water from it for supply. We could make dams higher to increase the capacity of reservoirs or create hundreds of smaller ponds in the landscape to store water and enhance the natural habitat. Partnering with other suppliers in the wider regions, there may even be opportunities to create new strategic water storage options.



Using river water wisely

The Environment Agency grants abstraction licences to take specified amounts of water from certain rivers in order to supply our network. The quantities are carefully managed through the licences and regularly reviewed as licences expire. We are exploring options to balance the supply by changing the terms of our licences: how much water we abstract, and where we get it from.



Using groundwater

Currently 90% of the water supply in our regions comes from rivers and lakes. The rest of it comes from groundwater that is extracted through boreholes. Some boreholes are not in use and could be re-commissioned to top up the supply. We are also looking at pumping water back into the ground to be abstracted later.



Recovering wastewater

Recycling water that has already been used is a clean and safe option that benefits the environment. Clean, treated water from wastewater treatment works can be returned directly to the network or it can be used to replenish groundwater supplies instead of being lost out to sea. We are also developing innovative approaches that work to enhance the environment and create rich habitats for wildlife, where recovered wastewater is used to support wetlands, keeping it in the regional system.



Balancing the flow of water

We have opportunities to take more water without causing any harm to the environment at certain times of year (when there is more available) or in locations where there is an abundance. This water can then be used at other times or in other places to make up a deficit. Taking advantage of these opportunities may mean a range of measures such as increasing the capacity of water treatment works or improving our network to get the water to where it is needed. Investing in a smarter network and upgrading works helps us to get the balance right.



Diversified water resources

In response both to climate change and also the extreme circumstances we faced in 2022, we have embarked upon a diversification of our water resources. Currently about 90% of our water resources are taken from surface water supplies (the balance from groundwater). We are currently moving at pace to develop additional resources from repurposed mines and quarries and also introducing climate independent sources into our mix, namely desalination at locations along the Cornwall coastline.

REGIONAL PLANS

The regions we supply are divided into five Water Resource Zones (WRZs). The following pages summarise our proposed plans for each of the WRZs.

WATER RESOURCE ZONE 1 COLLIFORD



Area covered

Most of Cornwall except the north east of the county.

Geography

Exposed to the forces of the Atlantic, Cornwall has a dynamic climate with intensive rainfall at times, particularly on high granite moorland in the interior, as well as warmer Winters and Summers. The predominantly impermeable bedrock makes for a rugged landscape where water quickly runs off into rivers.

Population centres

Penzance, Falmouth, Newquay, Truro and Bodmin

Population served

C. **551,590**

Important natural assets

Bodmin Moor is an Area of Outstanding Natural Beauty (AONB) in the middle of Colliford WRZ, the largest of a series of granite intrusions running East-West. The world-famous coastline can be walked along 330 miles of the Cornish Coastal Path, passing dramatic scenery and beaches that are extremely popular with tourists in the Summer. With a milder climate than other parts of the country, this region is home to several important, protected marine and terrestrial ecosystems. Many coastal areas form part of the Cornwall AONB, and this WRZ includes part of Tamar Valley AONB.

Total investment to 2030

C. **£106m**

Key challenges

Climate change will affect rainfall and bring longer drier periods.

In order to further protect the environment, we have to reduce the amount of water we are taking from certain rivers.

We are aiming to reductions leakage and overall demand so that there is less pressure on our resources and we make better use of them

OVER
THE NEXT
5 YEARS...



“I think the retailers and the wholesalers should educate people on how to save water.”

SWW Business customer,
Cornwall

REDUCING DEMAND

Consistently working at our current rate to reduce leaks, we will keep working towards a **50% reduction by 2050**. We will be replacing meters with smart meters and installing meters for customers who request them, giving us more insight and control over the water supply system.



Investment
£59.4 million

New or replacement meters over 5 years
35,987 meters

Total water savings from metering
2.15 megalitres

INCREASING SUPPLY

We plan to balance the flow of water by pumping more back up into Colliford and Sibbyback reservoirs, ensuring more consistent river levels all year round. We'll increase how much water we can treat at Restormel water works and increase how much we put into supply from Stannon Reservoir.



Investment
£46.5 million

Additional water available
6.5 megalitres

TO
2050

Reducing demand



Preventing and fixing leaks

We'll keep investing to reduce leakage at the same rate we have set in motion since 2020: finding and fixing leaks efficiently and upgrading pipes to reduce the risk of bursts and minimise the water lost from the system.



Installing smart meters

We'll begin a programme to roll out smart meters for all our customers. We will work street by street to replace old meters and install meters for those who don't currently have one. For those that haven't had a meter before, we will provide information on what they will pay if they move to a meter and allow them to choose to move to a meter or stay with their current bill.



Promoting community water efficiency

Based on the insights from our metering programme, we'll proactively engage with our customers to help identify customer leaks, or unusual water consumption to help support water efficiency.

Increasing supply



Storing more water

We plan to pump additional water from the river Camel to Colliford Reservoir in winter, for storage and use during summer as well as adding new supplies from existing quarry lakes at Leswidden (Penwith) and Hawk's Tor (Bodmin Moor).



Using river water wisely

A new strategic intake and treatment works on the River Fal is proposed to serve mid-Cornwall. We'll look to adapt the amount of water we use from Colliford Reservoir, Sibbyback Reservoir and Stannon Lake to allow greater deployment of water. More flexibility will also be sought through changes to our abstraction licences at Wendron treatment works.



Balancing the flow of water

Upgrades to our treatment works at Restormel will allow greater use of Colliford Reservoir and the River Fowey to relieve demand on other sources.

WATER RESOURCE ZONE 2 ROADFORD

Area covered

Parts of north east Cornwall and a large part of Devon, from Plymouth, the South Hams and Torbay in the south, to Bideford and Barnstaple in the north.



DID YOU KNOW?

45% of our daily water supply comes from Dartmoor

Geography

Devon has a dynamic climate with intensive rainfall at times, particularly on high granite moorland in the interior, as well as warmer Winters and Summers. The predominantly impermeable bedrock makes for a rugged landscape where water quickly runs off into rivers, but it also provides the hills and valleys that make this good reservoir country.

Both the coastline and the contrasting terrain of the interior with its wooded valleys and moorland are extremely popular for tourists who bring significant revenue to the local economy.

Population served

C. **866,470**

Population centres

Plymouth, Torbay, Newton Abbot, Okehampton, Torrington, Bideford, Barnstaple, Ilfracombe, Bude

Important natural assets

Dartmoor National Park lies at the heart of this WRZ and can be seen from all over the region. It also includes the Western corner of Exmoor National Park and the South Devon, North Devon and Tamar Valley Areas of Outstanding Natural Beauty.

The landscape gives harbour to numerous protected species such as the Marsh Fritillary and 3 out of the 5 Devon colonies of Southern Damsel fly.

Total investment to 2030

C. **£119m**

Key challenges

To further protect the environment, we have to reduce the amount of water we are taking from rivers, especially the River Dart.

We are aiming to reduce leakage and overall demand so that there is less pressure on our resources and we make better use of them.

OVER
THE NEXT
5 YEARS...

TO
2050

REDUCING DEMAND

Consistently working at our current rate to reduce leaks, we will keep working towards a **50% reduction by 2050**. We will be replacing meters with smart meters and installing meters for customers who request them, giving us more insight and control over the water supply system.



Investment
£87 million

New or replacement meters over 5 years
61,793 meters

Total water savings from metering
1.4 megalitres

INCREASING SUPPLY

Changes to our abstraction licences will let us use more water when it is released into the river from Roadford and use more water from Upper Tamar Lake. We'll also be increasing our capacity at two treatment works, while reducing the minimum capacity at another works so we are able to take no more than the water needed from the Avon



Investment
£32.1 million

Additional water available
5 megalitres

Reducing demand



Preventing and fixing leaks

We'll keep investing to reduce leakage at the same rate we have set in motion since 2020: finding and fixing leaks efficiently and upgrading pipes to reduce the risk of bursts and minimise the water lost from the system.



Installing smart meters

We'll begin a programme to roll out smart meters for all our customers. We will work street by street to replace old meters and install meters for those who don't currently have one. For those that haven't had a meter before, we will provide information on what they will pay if they move to a meter and allow them to choose to move to a meter or stay with their current bill.



Promoting community water efficiency

Based on the insights from our metering programme, we'll proactively engage with our customers to help identify customer leaks, or unusual water consumption to help support water efficiency.

Increasing supply



Storing more water

We are planning to pump additional water from the Tamar and Lyd to the Roadford Reservoir in winter for storage and use during the summer.



Using river water wisely

We plan changes to take water from the Yealm and Erme further downstream where more water is available in these rivers. Changes to an abstraction licence on the River Tamar, will also enable us to distribute water from Roadford Reservoir more effectively without affecting river levels.



Balancing the flow of water

Upgrades to our treatment processes at 5 of our treatment works will allow more water to be held back in reservoirs to be available at peak times. Licence changes to allow more water to be abstracted from Upper Tamar Lake, to relieve demand on other sources.



"I think incentivisation on things like water butts, more efficient toilets etc, so people get rewarded for how efficient they are."

SWW Business customer,
Devon

WATER RESOURCE ZONE 3

WIMBLEBALL

 RESERVOIRS

 Water Treatment Works

 Otter Valley groundwater sources

Area covered

Parts of north Devon, and the whole of east Devon, extending into parts of Somerset and Dorset.

Geography

Compared to the rest of the county, East Devon sits on more porous rock such as sandstone. This can be seen in the cliffs of the Jurassic Coast, where erosion has exposed 185 million years of successive layers deposited by the sea. Some of these layers are aquifers, which act like sponges to store large amounts of groundwater. This allows more reliance on groundwater sources for water supply. The rivers respond less quickly to rainfall than those in other parts of Devon and Cornwall.

The rolling landscape supports a flourishing agriculture, with much of the land given to grassland for livestock as well as growing food crops and forestry.

Population served

C. 365,760

Population centres

Exeter, Tiverton, Exmouth, Sidmouth, Honiton, Lyme Regis

Important natural assets

The Jurassic Coast between Exmouth and Lyme Regis is a World Heritage Site, and the entire coast can be walked on the South West Coastal Path. There are Areas of Outstanding Natural Beauty in the Blackdown Hills and East Devon.



“Just looking at ‘helping homes to use less water’, and in today’s environment I think it’s really important that we start to limit our water usage and not have as much wastage.”

Customer, Age 56+,
SEG DE

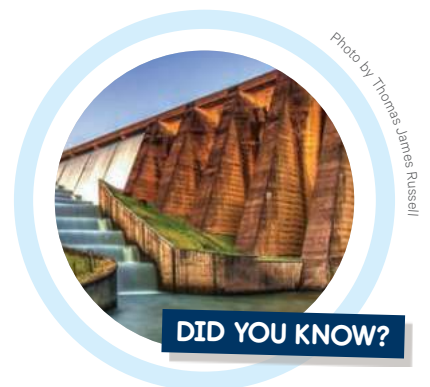
Total investment to 2030

C. £50m

Key challenges

To further protect the environment, we have to reduce the amount of water we are taking from rivers and groundwater, especially in the Otter Valley.

We are aiming to reduce leakage and overall demand so that there is less pressure on our resources and we make better use of them.



DID YOU KNOW?

The construction of Wimbleball with its stunning multiple buttresses was a feat of engineering completed in 1979.

OVER
THE NEXT
5 YEARS...

REDUCING DEMAND

Consistently working at our current rate to reduce leaks, we will keep working towards a **50% reduction by 2050**. We will be replacing meters with smart meters and installing meters for customers who request them, giving us more insight and control over the water supply system.



Investment
£36 million

New or replacement meters over 5 years
26,931 meters

Total water savings from metering
2.22 megalitres

INCREASING SUPPLY

Our plan is to rearrange where and when we use river water so that we improve the balance of water across the region and through the year. We'll seek changes to some of our licences to use river water as well as bringing 2 boreholes online and increasing the capacity of a treatment works to supply clean water.



Investment
£14.1 million

Additional water available
7.25 megalitres

TO
2050

Reducing demand



Preventing and fixing leaks

We'll keep investing to reduce leakage at the same rate we have set in motion since 2020: finding and fixing leaks efficiently and upgrading pipes to reduce the risk of bursts and minimise the water lost from the system.



Installing smart meters

We'll begin a programme to roll out smart meters for all our customers. We will work street by street to replace old meters and install meters for those who don't currently have one. For those that haven't had a meter before, we will provide information on what they will pay if they move to a meter and allow them to choose to move to a meter or stay with their current bill.



Promoting community water efficiency

Based on the insights from our metering programme, we'll proactively engage with our customers to help identify customer leaks, or unusual water consumption to help support water efficiency.

Increasing supply



Using river water wisely

We are seeking to alter a licence to take water from the River Exe so that we are able to make more strategic use of water from Wimbleball Reservoir while making sure that river levels are maintained. Changes to an abstraction licence will also allow us to supply more water from an existing river intake in East Devon without needing to build additional infrastructure.



Using ground-water

A new borehole and treatment works is planned as well as the reopening of 2 existing boreholes that will help to maintain the flow of water in the river Exe so it is less affected by seasonal demand and increased demand in the future.



Recovering wastewater

We plan to transfer treated wastewater from Sidmouth to the river Otter, replenishing Otter Valley groundwater sources.



Balancing the flow of water

Upgrading 2 of our water treatment works so that they can treat more water more efficiently will support the supply of the river Exe and ease demand on other, less resilient, sources of water.

WATER RESOURCE ZONE 4 BOURNEMOUTH

We took responsibility for the Bournemouth Water supply area when South West Water merged with Bournemouth Water in 2016.



Area covered

Parts of Dorset, Hampshire and Wiltshire, bordered on the south by the coastline between Bournemouth and the Beaulieu river.

Geography

Largely composed of clay, sand, and gravels, the geology of the Bournemouth region makes the terrain less rugged than our supply areas to the west. The main rivers in the area, the Avon and Stour are slow moving, meandering rivers where flows don't drop off as quickly after rainfall.

Population served

C. **453,970**

Population centres

Bournemouth, Christchurch, Lymington and Fordingbridge

Important natural assets

The WRZ includes parts of the New Forest National Park and Cranborne Chase as well as the West Wiltshire Downs Area of Outstanding Natural Beauty.

Total investment to 2030

C. **£29m**

Key challenges

The Hampshire Avon and its tributaries are chalk streams, recognised internationally for their unique characteristics and biodiversity. We need to change the way we abstract from the river through time to help protect this environment, particularly in its lower reaches from Bicton to Christchurch, a designated Sight of Special Scientific Interest.

We need to reduce how much water we use from the River Avon. Combined with climate change, this will remove more than half of our available water.

We are aiming to reduce leakage and overall demand so that there is less pressure on our resources and we make better use of them.

● Water Treatment Works

“I think it's really quite worrying, that by 2040 there could be only half the water from the River Avon ... It's a bigger move on awareness and education; it's everyone's problem and responsibility to be careful with water.”

BW customer, ABC1, Aged 18-45



DID YOU KNOW?

The lakes along the Rivers Stour and Avon are mainly used to protect against poor river water quality rather than to provide water resources storage.

OVER
THE NEXT
5 YEARS...

TO
2050

REDUCING DEMAND

Consistently working at our current rate to reduce leaks, we will keep working towards a **50% reduction by 2050**. As the Bournemouth area is designated as 'water stressed', we will follow guidance from the Environment Agency to begin metering all properties in the supply zone.



Investment
£27.5 million

New or replacement meters over 5 years
41,524 meters

Total water savings from metering
2.82 megalitres

INCREASING SUPPLY

We are planning an additional borehole to put more water into supply from groundwater in the south east of the Water Resource Zone and aim to make smarter use of sources on the Stour by changes to our licences.



Investment
£1.7 million

Additional water available
1 megalitre

Reducing demand



Preventing and fixing leaks

We'll keep investing to reduce leakage at the same rate we have set in motion since 2020: finding and fixing leaks efficiently and upgrading pipes to reduce the risk of bursts and minimise the water lost from the system.



Installing smart meters

We will be replacing meters with smart meters and installing meters for all customers in line with advice from the Environment Agency for 'water stressed' areas. This will give us more insight and control on the water supply system, supporting our work to help customers reduce water consumption, reduce leaks on their properties, and manage their bills. We aim to achieve Universal Smart Metering by 2035.



Promoting community water efficiency

Based on the insights from our metering programme, we'll proactively engage with our customers to help identify customer leaks, or unusual water consumption to help support water efficiency.

Increasing supply



Storing more water

We are working in partnership with Wessex Water and Bristol Water to create new reservoir for the region (Cheddar Two), which will secure the supply from the Dorset Stour. We are also investigating the option of using an aquifer to store groundwater we can use it to top up the Stour in drier periods.



Using groundwater

As well as developing a new borehole we are seeking changes to our licence so that we can recommission and continue to use an existing borehole to supplement the river Stour.



Recovering wastewater

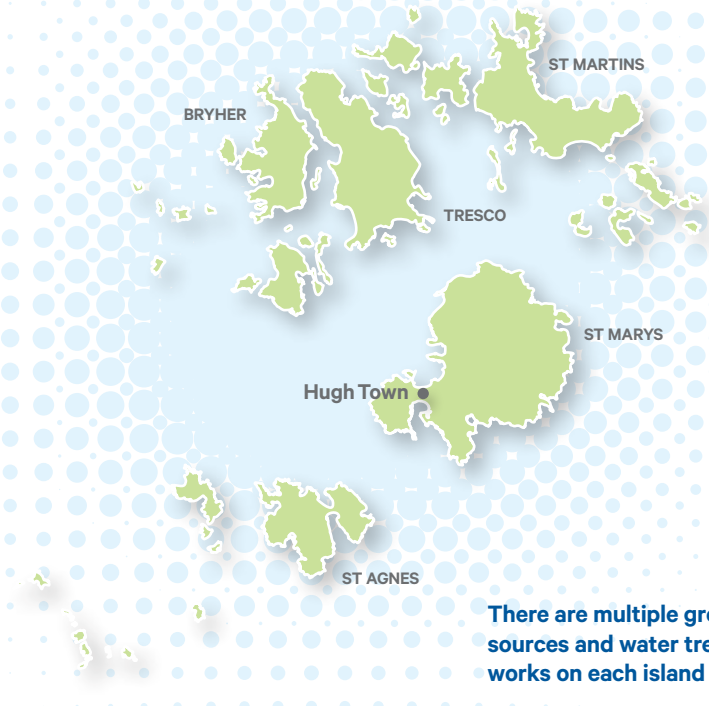
We are investigating transferring treated waste water from Christchurch to supplement the river Stour so that we are able to take more water from the Stour at times of low flow without harming the environment. Partnering with Wessex Water, we are also planning a similar approach with treated waste water from Poole.

WATER RESOURCE ZONE 5 ISLES OF SCILLY

In 2020, we took over the provision of water and wastewater services for the Isles of Scilly.

DID YOU KNOW?

The population on the islands can grow to **c. 4,500** during the tourist season



There are multiple groundwater sources and water treatment works on each island

Area covered

The Islands of St Mary's, Treско, St Martin's, Bryher and St Agnes.

Geography

The Isles of Scilly is an archipelago with granite bedrock. It includes 5 inhabited islands and around 140 other small islets. A sixth island, Samson, was also inhabited until 1855. The milder climate allows flowers to be grown well ahead of those on the mainland, and the largest agricultural export is cut flowers, mostly daffodils.

Population served

c. 2,100

Population centres

St Mary's: Hugh Town and Old Town and more rural areas – McFarlanes Downs, High Lanes

Treско: New Grimsby and Old Grimsby

St Martin's: Higher Town, Middle Town and Lower Town

St Agnes: Higher Town and Middle Town

Bryher: The Town and Lower Town

Important natural assets

The whole of the Isles of Scilly has been designated an Area of Outstanding Natural Beauty and is the smallest of these in the UK. The Scilly Shrew and Scilly Bee are unique to the islands. There are many ancient scheduled monuments.

Total investment to 2030

up to £1m

Key challenges

There are no new sources of water on the island and we cannot bring water in from elsewhere. Because of our limited resources, we aim to become less dependent on borehole sources so that we can maintain the aquifers (groundwater) that feed them and protect the environment they sustain.

Power upgrades are needed for new infrastructure that will also make it possible to transport new equipment to commission new water treatment works.

Because the islands are remote we need to ensure that we think carefully about how we maintain supplies of equipment and people to keep the water flowing, designing an approach that fits the needs of the islands.

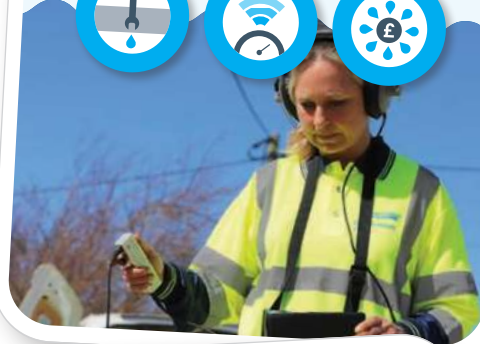
Through closer monitoring, we are starting to gather more insight into how the groundwater responds to rainfall. The recent drought has seen levels in our boreholes drop significantly helping us better understand the impacts of reduced rainfall.

We need to invest in sustainable solutions wherever possible, reducing the amount of water lost as well as reducing CO₂ emissions.

OVER
THE NEXT
5 YEARS...

REDUCING DEMAND

We will continue to improve metering. Introducing the compulsory metering recommended by the Environment Agency for water-scarce areas will give greater insight we can use to improve water efficiency and leakage management. We'll help customers with advice and finding and fixing leaks on their properties and we're reviewing new technologies and equipment suitable for use on the islands.



INCREASING SUPPLY

We will be harvesting the benefits of major investment before 2025 to improve water quality in line with the targets set by the Drinking Water Inspectorate. This will also improve the resilience of our water treatment works and the volume of water they can produce. We will continue to optimise the balance between taking water from boreholes and the sea to minimise our overall environmental impact.



TO
2050

Reducing demand



Preventing and fixing leaks

We will take the good practice which we are developing on the mainland and seek to apply this learning to the islands, improving our understanding of the network's performance, fixing leaks and upgrading pipes when we need to.



Installing smart meters

Whenever a meter needs replacing on a section of our network, we will replace it with a smart meter, improving our ability to manage our water supply systems overall.



Promoting community water efficiency

Based on the insights from our metering programme, we'll proactively engage with our customers to help identify customer leaks, or unusual water consumption to help support water efficiency. The islands have a strong community spirit and we will tailor our communications and approach to meet their needs.

Increasing supply



Storing more water

We will continue using groundwater wherever this is sustainable. However, it is likely that the groundwater sources will be supplemented by more desalination: where we take sea water and make it drinkable.



Using groundwater

We are investing in new water treatment systems and producing more water to enable new connections for new customers who wish to be supplied. This means we will be better prepared to cope in the future with climate change and increasing population and agricultural demand as well as providing more water for the seasonal tourist population, supporting the Isles of Scilly economy.



“Definitely I have a partner who leaves the tap running whilst he cleans his teeth, so I think I'll go on a bit more about that one.”

SWW customer, Group 3, ABC1, Aged 56+

OUR ADAPTIVE STRATEGY

Our preferred plan accounts for the most likely future as well as our customers' views on water restrictions and the acceptability of our proposals.

However, for each of our Water Resource Zones, under extreme conditions of additional supply restrictions supply shortages or higher demand in the next 25 years, we need to be ready to implement variations in our Water Resources Management Plan. This could mean bringing some projects forward and starting them sooner or adding different options into the mix.

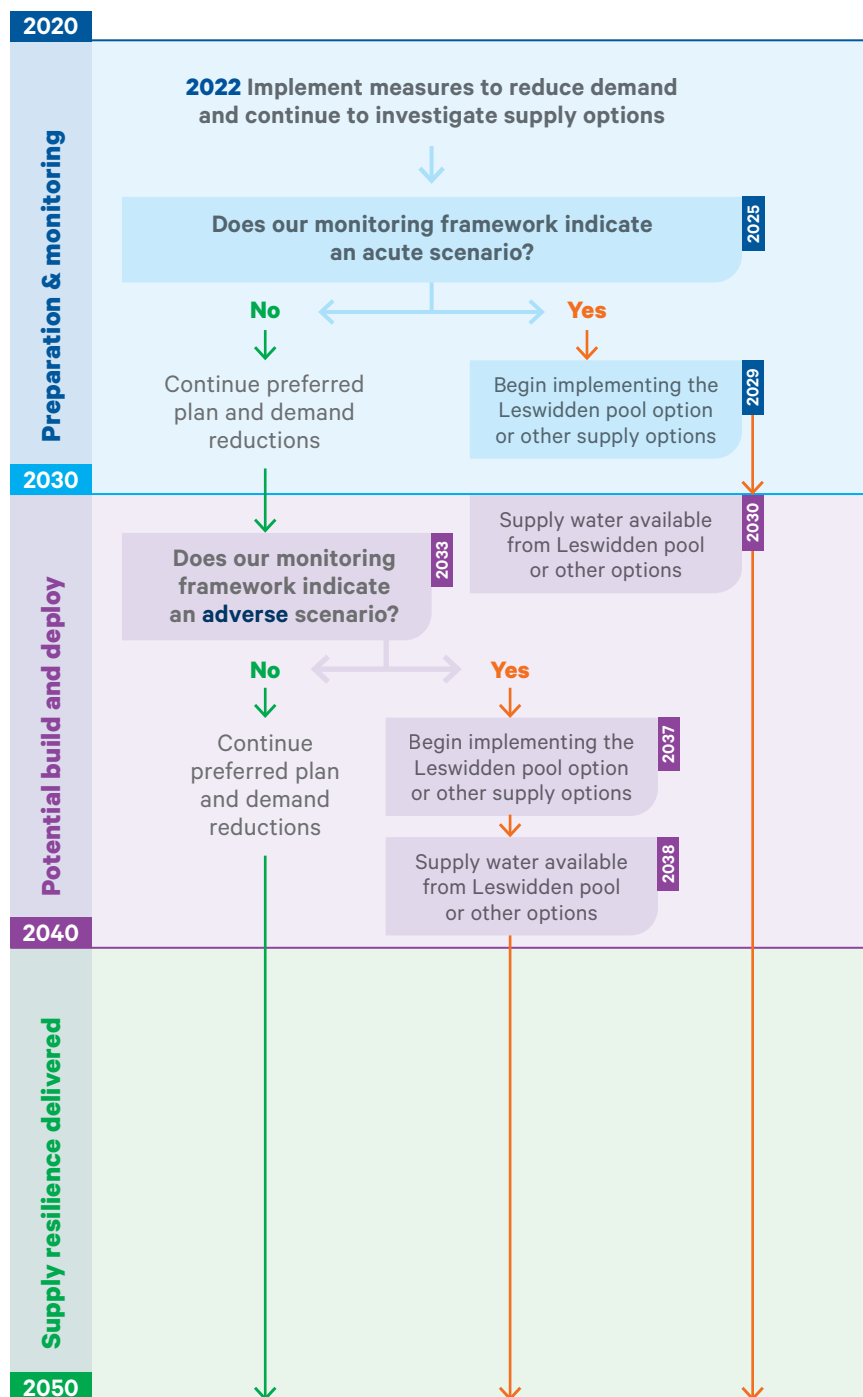
To help us decide if we need to adapt our plans, we will regularly monitor the likely effects on the supply-demand balance from

- Climate change
- Changes to environmental policy affecting how much water we can abstract
- Growth in population and demand
- The pace of technological innovations that improve water efficiency
- Emerging opportunities for local and strategic regional supply options.

WATER RESOURCE ZONE 1 COLLIFORD



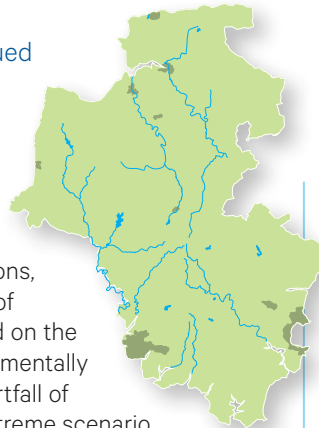
In the most extreme future scenario, there could be a challenge to the supply-demand balance as early as 2025. If this is the case, we could introduce other supply options to pump water from quarry lakes sooner than planned to quickly fix the gap. This could also be implemented around 2037 if our monitoring shows the development of an adverse scenario at that point. We may identify the need to develop additional schemes for Colliford WRZ in the future to anticipate variations to the plan.



Our adaptive strategy continued

WATER RESOURCE ZONE 2
ROADFORD

As part of our ongoing investigations, we will be determining what level of abstraction reductions are needed on the rivers Dart and Tavy to be environmentally sustainable. There could be a shortfall of supply in 2033 under the most extreme scenario. This would require investigation and work to complete an additional scheme to pump additional water from the River Lydd to Roadford Reservoir for winter storage by around 2034. A less-extreme future may require upgrades to two water treatment works to be completed around 2045.



WATER RESOURCE ZONE 3
WIMBLEBALL

Wimbleball WRZ is particularly sensitive to climate change impacting supply or demand. There may be a shortfalls in 2033 and more severe shortfalls around 2037, depending on precisely what abstraction reductions will be required. We therefore need to prepare for two shortfall scenarios: an acute one and a less acute one (adverse). We'll investigate options to reinstate a borehole and another to reuse treated water to support the River Otter. We must also continue to develop further supply options, including large-scale strategic options that could support water availability in the broader regions.



2022 Implement measures to reduce demand and continue to investigate supply options

Does our monitoring framework indicate an acute scenario?

2028

No

Yes

Continue preferred plan and demand reductions

Begin implementing option to support Roadford Reservoir with transfers from River Lyd

2032

Additional water available for supply from Reservoir

2034

Does our monitoring framework indicate an adverse scenario?

2042

No

Yes

Continue preferred plan and demand reductions

Begin adaptations to two water treatment works

2046

Output optimised levels of supply from treatment works

2048

2022 Implement measures to reduce demand and continue to investigate strategic regional options (SROs) and other supply options

Does our monitoring framework indicate an adaptive scenario?

2028

No

Adverse

Acute

Continue preferred plan and demand reductions

Begin implementing Sidford borehole and water reuse scheme for River Otter

2030

Additional supply available from borehole and water reuse scheme

2033

Begin implementing SRO

2033

Additional supply available from SRO

2037

WATER RESOURCE ZONE 4
BOURNEMOUTH



Under more extreme demand and climate-change scenarios, our plan could fall into supply-demand deficit in 2040 or 2045. We must therefore continue to develop further supply options for Bournemouth WRZ, including investigations into the Cheddar 2 Reservoir. We will also investigate what level of abstraction reductions on the River Avon are needed to meet environmental targets. Further studies and collaborative planning is needed, working with a Regional Plan to develop a cost-effective scheme to address the deficit expected in 2040 onwards

WATER RESOURCE ZONE 5
ISLES OF SCILLY

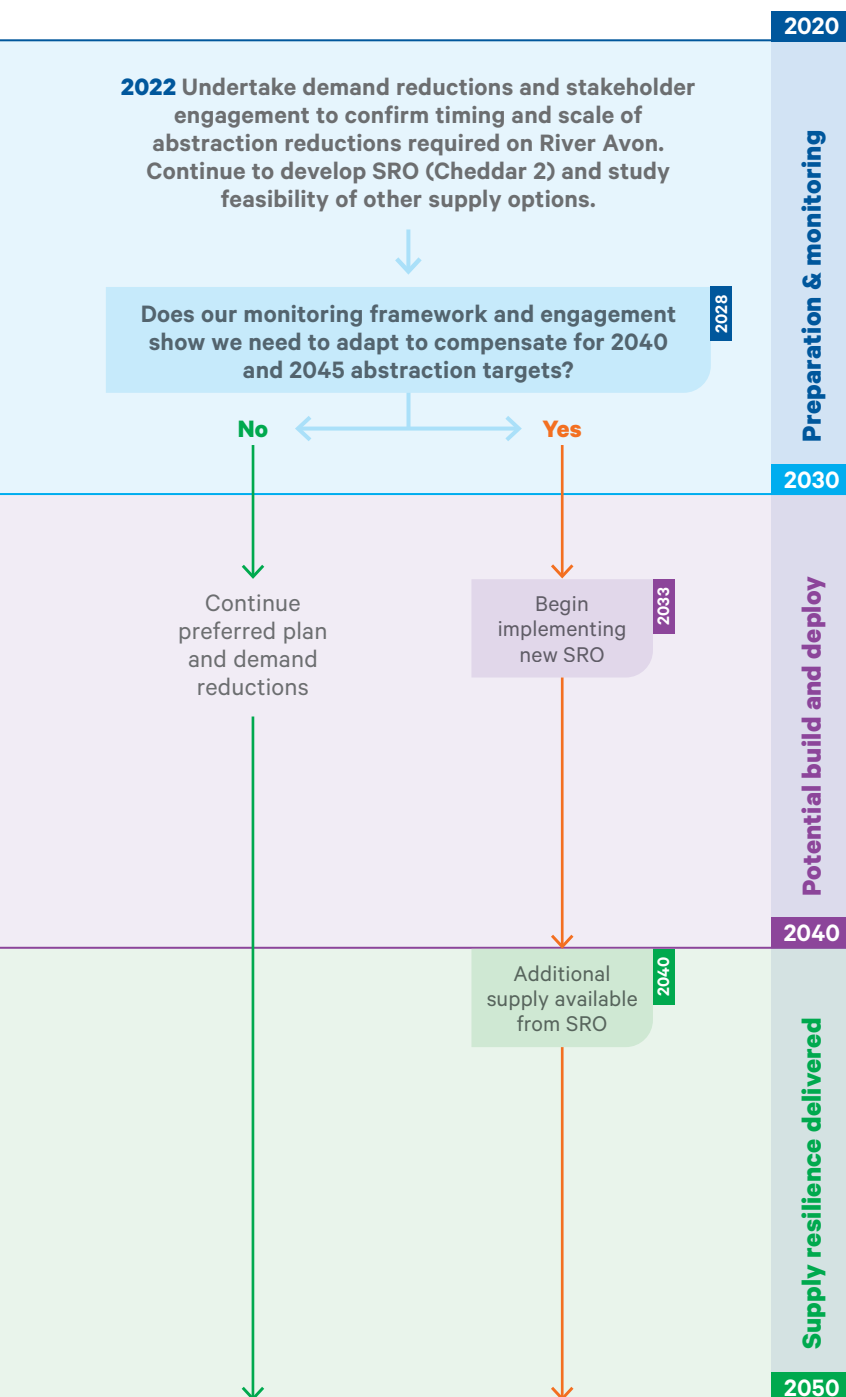


The Isles of Scilly are expected to have a healthy surplus in the supply-demand balance for the next 25 years, with supplies coming from a blended mix of groundwater from boreholes and desalinated sea water. However, as a precautionary measure, we will continue to study and review the water resources available to the islands and the interaction between any water abstractions and the environment.

The outcome of our studies will determine whether we can continue to abstract the same amounts of groundwater allowed by our abstraction licences while also preserving the environment. Our preferred plan for 2025 onwards is based on no changes to the abstraction levels in the future.

A challenging scenario is extremely unlikely to emerge due to climate change or population variations if we can draw on sea water from around the islands. However, we may need to adapt to use less ground water (if abstraction licences are reduced or not renewed) by increasing the capacity of desalination for the islands from 2030 onwards.

Our options also include developing a resilient supply solely from desalinated sea water if necessary.





HOW COULD THE PLAN AFFECT YOU?

“

“As an angler, I enjoy spending time by the river, and I want to be sure it stays full and sustains life.”

“We are on the same page. We all want to look after the environment. I think that's worth it if we all have to be more careful in how we use water, as long as the water companies are doing their bit too. It's good to know they will be taking less water from rivers, and the flow levels will be more consistent. It's not a case of 'people versus the environment' – we can have both.”

“As a farmer, I will be affected by climate change and I am already struggling to grow enough winter forage for my animals.”

“I'm getting more support with the things I can do to make my business more resilient. There is advice and investment available and, through partnership programs, I am part of a bigger conversation with suppliers and other stakeholders in the whole region, where we can take a collaborative approach to water-resource management.”

“As a family, we have to do endless laundry and I don't see how we are going to use less water.”

”

“Our new smart meter has made me more aware of saving water. I've been surprised what a difference can be made in small ways. We also got a Buffalo bag for our cistern, and tap inserts provided by South West Water; I think they have made a difference. And saving water now means we are saving money too, so it's kind of a fun challenge.”

“

“As a food-production business owner, the supply of clean water is critical to my business. Potatoes don't wash themselves! We use a lot of water, but we are also providing something essential.”

“I was invited to participate in a forum. I learned a lot about what's being done, heard from other people in similar situations to me, and got to make a few points myself. I was also offered a water audit of my business to help identify where we could take efficiency measures. With a smart meter, I am only paying for what I use and it actually makes economic sense to replace some of our equipment with parts that have a higher efficiency rating.”

”



“As someone who enjoys the outdoors, I regularly walk my dog at a reservoir and sometimes it looks a bit low.”

“I know that we collectively need to make changes to preserve water supplies if we want to keep our beautiful countryside thriving. I am glad that it is not an impossible situation and my supplier is getting on with fixing leaks and doing things like topping up the reservoirs whenever there is an abundance of water available. It makes me feel more like I can make a difference too.”

Ensuring affordability

Our preferred Plan is designed to strike a balance. We are making sure that water bills are affordable and any increases in cost to our customers are acceptable, offering the best possible value when it comes to protecting them and boosting the environment.

To do this we are...

- Lowering demand
- Developing new sources of water
- Introducing universal metering
- Supporting people to cultivate more water-saving behaviours.

Through listening to our customers, we have learned that any increase in their water bills must clearly be linked with benefits to the environment as well as minimal risk of severe water restrictions in the future.

PUBLIC CONSULTATION

Your feedback

We would love to hear your feedback on our plan. We will be carrying out a period of public consultation on the draft Water Resources Management Plan for a period of 12 weeks and we will use our Statement of Response to reply to feedback.

The next steps for our WRMP

February 2023 – Draft WRMP submission to Defra

February - May 2023 – Consultation and engagement period

August 2023 – Statement of Response on WRMP published

November 2023 – Final WRMP submission

December 2023 – Final WRMP publication

What do you think?

Some particular questions you may wish to consider are:

Our adaptive planning approach

- Our draft WRMP sets out an adaptive approach that enables us to have plans in case of a wide range of future scenarios. Are there any other future scenarios that you think we should consider?
- Given the large range of future uncertainties described in our Plan, does our adaptive approach enable us to address your main concerns looking into the future? Is there a different approach you think we could follow?

Best value for our customers and the community

- Do you think that our plan represents the best value for you and your community?

Our approach to improve the environment

- Do you agree with our various approaches to protecting the environment across our area of operations?
- How do you feel about the potential impact of regulatory requirements combined with our own environmental aspirations as reflected in our Environmental Destination (abstraction reduction targets)?

Demand/supply balance

- To address the forecast supply/demand deficit, our draft WRMP includes options that will reduce demand and options that give us additional water supplies. Do you think our plan strikes the right balance between demand and supply solutions?
- Are there any other significant risk factors that you feel could affect our supply-demand balance in the future?

Our approach to reducing demand for water

- Our draft WRMP24 sets out our preferred options to address a forecast supply/demand deficit. How supportive, or unsupportive, are you of our options for reducing water demand? Are there other options that you think we should be considering to decrease demand?
- Our plan has a significant focus on reducing demand by 2050. Some of the options adopted are not in our direct control. Do you think this is the right approach? Should we plan for more additional new sources of water in case these do not deliver as much water as forecast?
- How should we prioritise demand management? Are there other assumptions or risks (in addition to relying on government policy) that we should factor into our plan?
- Our ambition to help to reduce customer water use by 25% to 110 litres per person per day by 2050 calls for significant investment from us, but it also requires government interventions (e.g., the labelling of water-using products). What is your view on this approach?

Water recycling

- Do you agree that water recycling should be a part of the solution for securing water supplies for the future?
- Do you think that we should look at water recycling options where recycled water will be stored in reservoirs, lakes or other water bodies? And where recycled water is released back into nearby rivers and then abstracted again downstream?

Water network resilience

- Do you agree that we should develop our network so that we can move more water between our supply areas and share supplies with our neighbouring water companies?

Droughts and levels of service

- What are your views on our levels of service in the event of a drought?
- According to requirements from the government, we must be resilient to a 1 in 500 year drought event by no later than 2039. How supportive or unsupportive are you of this goal?

General

- Do you have any additional comments on any of the plans we have proposed in our draft WRMP?

HAVE YOUR SAY!



How you can respond

All responses to this consultation should be sent to the Secretary of State for the Environment, Food and Rural Affairs (Defra).

You can respond by e-mail to water.resources@defra.gov.uk

Please carbon copy (cc) wrm@southwestwater.co.uk

Please title your e-mail 'SWW draft Water Resources Management Plan'.

You can respond by letter to:
Secretary of State, Water Resources Management
Plan Water Services, Department for Environment,
Food and Rural Affairs Seacole 3rd Floor
2 Marsham Street London SW1P 4DF.



South West
Water